

ABSTRACT OF THE DISCLOSURE

A turbocharged engine system (20) has an intake system (26) through which charge air enters combustion chambers and an exhaust system (28), including a CDPF (34), through which products of combustion pass to the surrounding atmosphere. A throttle valve (36) disposed in the exhaust system downstream of both the CDPF and the turbocharger turbine (30) controls engine back-pressure. An EGR flow path for recirculating exhaust gas from the exhaust system to the intake system includes an EGR valve (48) for controlling EGR flow. The EGR flow path has a pierce point to the exhaust system upstream of the throttle valve and downstream of both the CDPF and the turbine and a pierce point to the intake system upstream of the turbocharger compressor. Valves (36, 48) are under coordinated control provided by an engine control system (24) via for selectively restricting the respective valves to attain desired EGR flow. The invention improves emission control performance and reduces the fuel economy penalty imposed by use of low-pressure EGR.